# Avoiding Armageddon: The US Military's Response to Trans-Regional Nuclear Proliferation in a Post-Soviet World

A Monograph

by

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#### **Abstract**

Avoiding Armageddon: The US Military's Response to Trans-Regional Nuclear Proliferation in a Post-Soviet World, by MAJ Andrew S. Glenn, US Army, 47 pages.

Following the dissolution of the Soviet Union in 1991, black markets for nuclear material rapidly expanded and proliferation by both state and non-state actors soared. The Department of Defense began a lengthy process of creating mechanisms to address the proliferation through what ultimately became a strategic comprised of three pillars: nonproliferation, counterproliferation, and consequence management. The Department of Defense ultimately achieved unity of command by enforcing organizational changes within the department, establishing a new functional combatant command with a sub-unified command that maintains responsibility for integrating and synchronizing plans and operations to counter proliferation, and by establishing contingency plans to address known proliferation events.

By studying strategic documents, operations plans, unified command plans, and organizational histories, the author determined that key to counterproliferation has been unity of command. While unity of command was not immediate, the department did achieve unity of effort early, which mitigated serious consequences.

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#### Introduction

At 7:00 AM on the nineteenth of August 1991, tanks of the *Tamanskaya* and *Kantemirovskaya* Tank Divisions barreled into Moscow, reinforced by the Fifty-First, 137th, and 331st Paratroop Regiments. The forces quickly surrounded the Kremlin and the Russian White House. Simultaneously, conspirators placed the Soviet president Mikhail Gorbachev, his family, and several of his closest advisors under house arrest at his dacha in the Crimean town of Foros. To limit further his ability to leave, the conspirators parked two tractor-trailers on the airfield blocking his Tupolev TU-134 jet and Mil MI-8 helicopter. After several tense hours of this stand-off, Russian president Boris Yeltsin exited the Russian White House and climbed on top of a tank of the *Tamanskaya Division*, denouncing the coup. This would later prove to be an iconic moment, greatly enhancing Yeltsin's image and popularity and unintentionally demonstrating the impotence of the Soviet president. Unfortunately, the coup d'état persisted and would ultimately have the unintended consequence of bringing about the dissolution of the Union of Soviet Socialist Republics.

The conspirators remained quiet until the following afternoon. When they finally appeared, they confirmed the power grab by the *State Committee on the State of Emergency*—or the *Gang of Eight*. The *Gang of Eight* included Gorbachev's vice president Gennady Yanayev, Soviet prime minister, Valentine Pavlov, defense minister Marshal Dmitry Yazov, interior minister Boris Pugo, chairman of the Committee for State Security (KGB) Vladimir Kryuchokov,

<sup>&</sup>lt;sup>1</sup> Andrew Glenn, trans., "Avgustovskiy putch GKChP. Khronika cobitiy 19-22 avgusta 1991 goda," *REA Novosti*, August 19, 2011, accessed March 8, 2016, http://ria.ru/spravka/20110819/415632412.html.

<sup>&</sup>lt;sup>2</sup> Serge Schmemann, "The Soviet Crisis; Gorbachev Reportedly Arrested in the Crimea," *The New York Times*, August 20, 1991, accessed October 11, 2015, http://www.nytimes.com/1991/08/21/world/the-soviet-crisis-gorbachev-reportedly-arrested-in-the-crimea.html.

<sup>&</sup>lt;sup>3</sup> William Green Miller, *American Diplomacy and Soviet Disintegration* (Washington, DC: Institute for the Study of Diplomacy Publications, 1996), 16-17.

and several others. In a televised statement, Yanayev denied the putsch and stated that he assumed power only to allow Gorbachev time to recuperate and tend to his poor health, resulting from his heavy workload over the preceding six years. Yanayev further stated that the Gang of Eight would continue to pursue Gorbachev's policies that he "began in 1985." This statement, of course, was as ingenuous as the putsch was legitimate.

At the heart of the conspirators' grievances lay the *New Union Treaty*—also known as the *Novo-Ogoryovo Treaty* or the *Treaty for the Union of Sovereign States*. Gorbachev led delegates through several iterations of drafting and negotiating the treaty. On twenty-five July 1991, Gorbachev announced that the representatives had negotiated a final treaty, which would fundamentally alter the Soviet Union. First, the treaty was entirely voluntary. States had the option of being signatories. The Baltic States (Estonia, Latvia, and Lithuania), Armenia, Georgia, and Moldova boycotted a referendum on maintaining the union and announced their intentions not to sign the treaty and to leave the union. The remaining republics—Russia, Belarus, Ukraine, Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan—agreed to remain. The *New Union Treaty* shifted power from the federal

<sup>&</sup>lt;sup>4</sup> Gennedy Yanayev, produced by Simon Marks, "The Soviet Coup: Day One, August 19<sup>th</sup> 1991," *World Monitor* (1991; The Discovery Channel, 2011), accessed October 11, 2015, https://www.youtube.com/watch?v=LsF4c06txHM. Yanayev's comments echoed the conspirator's original statement released on state radio. "BBC ON THIS DAY | 19 August 1991: Hardliners Stage Coup Against Gorbachev," *BBC News*, last modified 2015, accessed October 11, 2015, http://news.bbc.co.uk/onthisday/hi/dates/stories/august/19/newsid\_2499000/2499453. stm.

<sup>&</sup>lt;sup>5</sup> Bridget Kendall, "New Light Shed on 1991 Anti-Gorbachev Coup," *BBC News* (August 18, 2011), accessed October 14, 2015, http://www.bbc.com/news/world-europe-14560280.

<sup>&</sup>lt;sup>6</sup> Carey Goldberg, "New Soviet Federal Treaty Completed: Reform: It Launches A Transformation From A Centralized Empire To A Looser Federation Of Sovereign States. The Signing Will Strengthen Gorbachev's Hand," *LA Times* (25 July 2015), accessed October 14, 2015, http://articles.latimes.com/1991-07-25/news/mn-177 1 union-treaty.

<sup>&</sup>lt;sup>7</sup> Roman Solchanyk, "Union Treaty," *Encyclopedia of Russian History* (2004), accessed October 14, 2015, http://www.encyclopedia.com/doc/1G2-3404101429.html.

government to these independent republics. It granted the ability to raise armies for limited use and decreased the role of the central government's economic policies.<sup>8</sup>

Kryuchokov, as paranoid as westerners would expect the head of the KGB to be, bugged negotiations and shared the results with the other hardline conspirators. In their desperate attempt to thwart the perceived dismantlement of their beloved empire, they decided to wrest power from Gorbachev and continue the existing order of the Union of Soviet Socialist Republics. Ironically, their attempt likely hastened the dissolution of the Soviet Union.

The coup, which started the day before the *New Union Treaty* was signed and in effect, lasted only three days. During the confusion of the coup, the three Baltic States opportunistically declared their independence. In the week following the putsch, five other states (including three of the four hosts of the Soviet's nuclear arsenals and four of the nine states that agreed to the *New Union Treaty*) declared their independence, as well. The conspirators met one of their goals: the prevention of the creation of the Union of Sovereign States. Their plan, however, ultimately backfired as the Soviet Union existed in name and for a short time, only. On December Eighth of 1991, Russian, Ukraine, and Belarus declared the end of the Soviet Union and the formation of the Commonwealth of Independent States. This was despite the efforts Gorbachev made to draft a new union treaty to replace the failed Twenty August treaty. Ultimately, he realized that only the loosest confederation would be possible and capitulated to the Commonwealth of Independent States, announcing on December Seventeenth that the Soviet Union would cease to exist by the end of the month. Gorbachev and Yeltsin met and agreed to the transfer of state functions from the Soviet Union to the Russian Federation. <sup>10</sup> On Christmas Day, Gorbachev made his final

<sup>&</sup>lt;sup>8</sup> Andrew Glenn, trans., "Dogovor o Soyuze Syverenniyx Gosudarstv," *Pravda* (27 November 1991), reproduced in Gorbechav Fund, accessed 14 October 2015, http://www.gorby.ru/gorbachev/zhizn\_i\_reformy2/page\_31/.

<sup>&</sup>lt;sup>9</sup> Kendall, "New Light."

<sup>&</sup>lt;sup>10</sup> Miller, American Diplomacy, 16-20.

appearance announcing his resignation as president, as the Union of Soviet Socialist Republics existed no more.<sup>11</sup> The defining global order changed.

Three short weeks before the August coup, the United States and Soviet Union had signed the Strategic Arms Reduction Treaty (START). The United States, understandably, maintained an interest in seeing START not dissolve along with the Soviet Union. Secretary of State James Baker expressed concern of the Soviet dissolution resulting in a "Yugoslavia with nukes." While most of the Soviet Union's nuclear arsenal resided within Russia, there were more than twenty deployment, production, and other nuclear weapons related sites outside of the state. Additionally, there were seventy-two nuclear-equipped intercontinental ballistic missiles (ICBM) in Belarus, more than one-hundred in Kazakhstan, and nearly 200 in Ukraine.

Additionally, Kazakhstan and Ukraine each possessed nuclear-equipped air-launched cruise missiles. Secretary Baker was understandably concerned.

Ultimately, the former Soviet republics of Ukraine, Belarus, and Kazakhstan all safely surrendered their Soviet nuclear weapons to post-Communist Russia in the years that followed, and became signatories of the Nuclear Non-Proliferation Treaty in 1993 or 1994. <sup>14</sup> Despite these voluntary surrenders, large quantities of nuclear material proliferated and seeped into a transregional black market—representing a threat that persists today with nearly eighteen open-source reports of nuclear-related trafficking incidents in 2009 and 2010. Today, these 'loose nukes'

<sup>&</sup>lt;sup>11</sup> Mikhail Gorbachev, "Farewell Address," *The New York Times* (December 25, 1991), accessed October 14, 2015, http://www.nytimres.com/1991/12/26/world/end-of-the-soviet-union-text-of-gorbachev-s-farewell-address.html?pagewanted=all.

<sup>&</sup>lt;sup>12</sup> Keith Bradsher, "Noting Soviet Eclipse, Baker Sees Arms Risks," *The New York Times* (December 9, 1991), accessed November 17, 2015, http://www.nytimes.com/1991/12/09/world/noting-soviet-eclipse-baker-sees-arms-risks.html.

<sup>&</sup>lt;sup>13</sup> Ivo Daalder, *Nuclear Arms Control After the Moscow Coup* (Washington, DC: Institute for the Study of Diplomacy Publications, 1996), 27.

<sup>&</sup>lt;sup>14</sup> United Nations Office for Disarmament Affairs, *Treaty on the Non-Proliferation of Nuclear Weapons*, accessed 17 November 2015, https://disarmament.un.org/treaties/t/npt.

represent one of many trans-regional threats that the US military must synchronize the efforts of geographic and functional combatant commands to address. To address better today's trans-regional threats, one ought to ask "how did the US military address the trans-regional nature of nuclear proliferation after the dissolution of the Soviet Union?"

By studying relevant documents from the Joint Staff, various combatant commands, and historical summaries, a slow evolution becomes visible. Throughout the 1990s, the country's counterproliferation efforts grew from simple deterrence to a coherent strategy, synchronized by the Department of Defense. To achieve coherence, the Department of Defense evolved mechanisms to synchronize counterproliferation efforts through multiple iterations of strategic guidance, institutional and structural changes (including the shifting of geographic combatant command boundaries, the creation senior executive service positions, and the consolidation of responsibility within a functional combatant command and a combat support agency), the creation of a specified contingency plan, and the empowerment of supporting commands to offensively counter proliferation.

#### Methodology

This monograph explains how the US Department of Defense counterproliferation approach evolved following the dissolution of the Soviet Union by examining the various documents that discuss counterproliferation strategy, combatant command charters, Unified Command Plans, and other directives. Examining the department's requirements for counterproliferation, set forth by the legislative and executive branches in the form of statutes, strategic guidance, and policies provides a glimpse into what the Department of Defense was attempting to achieve. The organization of the monograph will first seek to define the problem presented by the rapid proliferation of nuclear materials following Soviet dissolution in 1991. Criminal networks and opportunistic, disaffected former Soviet employees conspired to establish a global black market for nuclear material, which if left unchecked threatened US interests.

Following the framing of the problem and global environment, the monograph then examines the legislative- and executive-mandated department activities related to counterproliferation.

Unfortunately, a study of the legal requirements fails to demonstrate how the department actually achieved those tasks. The monograph then continues to delve deeper into National Military Strategies, Unified Command Plans, and other documents to understand how the Department of Defense established processes and mechanisms to synchronize its counterproliferation fight.

While much at the strategic level is discernible through this approach, it remains limited in its efficacy at studying operational integration and synchronization, primarily due to the recent and sensitive nature of the topic. Much of the most useful documents about counterproliferation activities at the combatant command level and below remain classified. The Joint Staff fortunately has declassified many of the early strategic documents related to counterproliferation—including parts of the critically important *Concept Plan for Counterproliferation 0400*. Many of these declassified documents, however, remain heavily redacted; as such, those individuals wishing to glean lessons for today's transregional fights must extrapolate extensively. The monograph attempts to assist in discerning those most important lessons that can be applied for countering violent extremist and criminal networks that have continued proven themselves to continue as not just transnational organizations but transregional and truly global in scale.

#### Historiography

Currently, little writing exists in the public domain concerning the military's approach to post-Soviet nuclear proliferation. Most of the literature exists as government policies, internal missives, and reports. This dearth of material likely stems from the contemporary nature of the problem.

One academic has reviewed the larger US policy approach to counterproliferation.

Michael Kimo Quaintance submitted a doctoral thesis in 2009 on the topic, titled *From Bad* 

Weapons to Bad States: The Evolution of US Counterproliferation Policy. Of particular note is a short section on the "emergence of an offensive [counterproliferation] policy from the [Department of Defense]." Quaintance struggled with classification issues but was able to note an evolution in the department's approach that became more offensively oriented to roll-back the tide of proliferation. His findings are highly consistent with this monograph.

Several pieces of literature do exist that contribute to the understanding of the problem when taken together.

Rensselaer Lee III penned *Smuggling Armageddon: The Nuclear Black Market in the*Former Soviet Union and Europe in 1998. In it, Lee draws several major conclusions. First,
during the tumultuous period from 1991 to 1994, the United States did not have a coherent plan to
address nuclear proliferation from the former Soviet states; consequently, the outflow at that time
is unknown and likely higher than at later times. Second, Lee posits the impossibility of total
prevention of nuclear proliferation of nuclear material. He finds attempts at control and nonproliferation to remain worthwhile. To enhance effectiveness of non-proliferation efforts, East
and West must enhance interoperability and the sharing of intelligence. Presumably, this remains
a viable endeavor even despite the recently increased tensions between Russia and the United
States, today. 16

In 1995, discussions at the Russian Littoral Project gave rise to several academicians and policy-makers from United States and the Commonwealth of Independent States writing articles on the nuclear challenges after 1991. Captured as a volume in a larger series on the international politics of Russia, *The Nuclear Challenge in Russia and the New States of Eurasia*—edited by George Quester—provides important discourse on proliferation, secession, and U.S. efforts to

<sup>&</sup>lt;sup>15</sup> Michael K. Quaintance, "From Bad Weapons to Bad States: The Evolution of US Counterproliferation Policy" (PhD diss., University of St. Andrews, 2009), 186.

<sup>&</sup>lt;sup>16</sup> Renssalaer W. Lee, *Smuggling Armageddon* (New York: St. Martin's Press, 1998).

control arms. Ultimately, Quester concludes that nuclear capabilities remain an important deterrence to facilitate non-proliferation.<sup>17</sup>

*Boundaries, Territory, and Postmodernity*, edited by David Newman and published in 1999, brings to the discussion the impacts of globalization and extra-territoriality. While this work does not contribute directly to the discussion of nuclear proliferation, it captures salient characteristics of the post-Soviet environment and the challenges in facing transnational and transregional threats.<sup>18</sup>

Fallout: The True Story of the CIA's Secret War on Nuclear Trafficking, published in 2011 by husband-and-wife Douglas Frantz and Catherine Collins, provides a unique and rare case study into a United States-led response to nuclear trafficking. This book chronicles the Central Intelligence Agency's operation to recruit three members of the Tinner family to provide information on Abdul Qadeer Khan's nuclear development work. Khan had led Pakistan's nuclear program and investigations have implicated him in proliferating nuclear materials to North Korea, Iran, and Libya. The key lessons from this book orient around the importance of intelligence in disrupting nuclear proliferation, as well as the concomitant risk of too much collection interfering with effective counter-proliferation operations. <sup>19</sup> Fallout ultimately shows the growing US response to proliferation and the scope of the interagency effort to counter it.

Another book focused on the Khan network is David Albright's *Peddling Peril: How the Secret Nuclear Trade Arms America's Enemies* from 2010. Albright's treatment of the topic is extensive with multiple case studies of the Khan networks interactions with rogue states. Further, he ends his book with a discussion of policy recommendations including making international

<sup>&</sup>lt;sup>17</sup> George H Quester, ed., *The Nuclear Challenge In Russia And The New States Of Eurasia* (Armonk, N.Y.: M.E. Sharpe, 1995).

<sup>&</sup>lt;sup>18</sup> David Newman, *Boundaries, Territory, And Postmodernity* (London: F. Cass, 1999).

<sup>&</sup>lt;sup>19</sup> Catherine Collins and Douglas Frantz, *Fallout: The True Story of the CIA's Secret War on Nuclear Trafficking* (New York: Free Press, 2011).

trade more transparent, increasing intelligence collection, and enhancing export controls and law enforcement.<sup>20</sup>

Michael Levi's *On Nuclear Terrorism*, published in 2007, studies many of the difficulties that terrorists or violent extremist organizations must overcome to acquire nuclear material. His work approaches the study using a systems analysis, and consequently highlights many implementable defenses that can prevent such proliferation. Levi then provides several recommendations for integrated defenses against nuclear attacks.<sup>21</sup>

Three books, written in 2005, attempt to parse post-Cold War nuclear weapons policy. *Nuclear Transformation: The New U.S. Nuclear Doctrine*, by James Wirtz and Jeffrey Larsen, focuses on the Nuclear Posture Review of 2001. The collection of articles focuses more on recommendations for a more robust US offensive nuclear policy strategy, but remains critical for understanding the nuclear environment in which our military operates. Of note, an article by Jeffrey Knopf suggests that the policies of the 2001 Nuclear Posture Review could increase the proliferation of nuclear material.<sup>22</sup>

Tom Sauer's *Nuclear Inertia: U.S. Weapons Policy After the Cold War*, seeks to explain why the United States failed to reduce its nuclear posture to one of minimum deterrence, after the collapse of the Soviet Union. Criticism of his work suggests that he relied too heavily on secondary sources and failed to contribute significantly to the historiography of this critical period. Sauer does highlight, however, the dangers of U.S. responses to non-state and virtual state threats.<sup>23</sup>

<sup>&</sup>lt;sup>20</sup> David Albright, *Peddling Peril* (New York: Free Press, 2010).

<sup>&</sup>lt;sup>21</sup> Michael A. Levi, *On Nuclear Terrorism* (Cambridge, MA: Harvard University Press, 2007).

<sup>&</sup>lt;sup>22</sup> James J. Wirtz and Jeffrey Arthur Larsen, *Nuclear Transformation* (New York: Palgrave Macmillan, 2005).

<sup>&</sup>lt;sup>23</sup> Tom Sauer, *Nuclear Inertia* (London: I.B. Tauris, 2005). See also: Jack Mendelsohn "The Muddle of U.S. Nuclear Weapons Strategy," *Arms Control Association*, accessed 27 November 2015, https://www.armscontrol.org/act/2005\_10/OCT-BookReviews.

Stephen Cimbala's *Nuclear Weapons and Strategy: U.S. Nuclear Policy for the Twenty-first Century* seems to be the least relevant to the study of transregional proliferation of the three books. Cimbala does begin his argument with a statement—now taken for granted—that nuclear weapons pose a unique danger in the hands of small, rogue states. These states remain large drivers of nuclear proliferation in the post-Soviet regime. <sup>24</sup>

The Nuclear Tipping Point: Why States Reconsider Their Nuclear Choices, by Kurt Campbell, Robert Einhorn, and Mitchell Reiss studies the motivations of actors (mostly states) that decline to pursue nuclear capabilities. While power is the primary driver for states to proliferate nuclear weapons, the authors find that the nuclear Nonproliferation Treaty (NPT) regime has largely succeeded in preventing states from seeking nuclear weapons. Understanding the institutional frameworks that have historically succeeded in overcoming actors' self-interests, we can then extrapolate and apply the lessons to other states and non-state actors.<sup>25</sup>

# **Proliferation**

The ten or so years preceding the collapse of the Soviet Union, represented a period of limited proliferation. *Proliferation* throughout refers to the spread of nuclear, biological, or chemical weapons and the missiles used to deliver them. <sup>26</sup> While no country openly acquired nuclear weapons, Pakistan and South Africa became *de facto* nuclear states, joining India and Israel in possessing large stocks of poorly controlled nuclear material. Further, several other countries during this period continued to seek—but not attain—nuclear capabilities. As a result,

<sup>&</sup>lt;sup>24</sup> Stephen Cimbala, *Nuclear Weapons and Strategy: U.S. Nuclear Policy for the Twenty-first Century* (Westport, CT: Praeger, 2000).

<sup>&</sup>lt;sup>25</sup> Kurt Campbell, Robert Einhorn, and Mitchell Reiss, *The Nuclear Tipping Point: Why States Reconsider Their Nuclear Choices* (Washington, DC: Brookings Institution Press, 2004).

<sup>&</sup>lt;sup>26</sup> John M. Deutch, *Report on Nonproliferation and Counterproliferation Activities and Programs* (Washington, DC: Office of the Deputy Secretary of Defense, 1994), 1.

U.S. policymakers had to reframe proliferation from a binary-possibility to a graduation of possible steps. No longer was it sufficient to characterize a country as simply a nuclear capable state; descriptions had to characterize the actors as having production capabilities, actual fissile materials, actual nuclear devices, operational weapons, and delivery systems. <sup>27</sup>

Overall global arms proliferation to third-world countries increased dramatically throughout the cold war to a high of \$40 billion annually during the early 1980s. These sales included conventional as well as chemical and biological weapons. Of note, sixty-nine percent of sales went to countries in the Middle East and South Asia, including India, Iran, Iraq, Israel, Libya, Pakistan, and Syria—several of which by 1991 became *de facto* nuclear states. Many of these new members of the nuclear club focused purchases on sophisticated aircraft and missiles capable of delivering such munitions over large distances.<sup>28</sup>

Generally speaking, actors in the nuclear proliferation game during the Cold War remained states; however, as the Soviet Union collapsed, the norms of nuclear proliferation shifted. In the first three years of the new global order, a spike occurred in criminal possession of nuclear materials jumping to more than forty-three incidents in 1993 and forty-five in 1994. Gone were the days where states were the primary actors on the national stage, giving rise to the super-empowered individual, capable of acting directly and powerfully on the world stage. 30

<sup>&</sup>lt;sup>27</sup> Michael T. Klare and Daniel C. Thomas, *World Security* (New York: St. Martin's Press, 1991), 150-160.

<sup>&</sup>lt;sup>28</sup> Klare, World Security, 172; Aaron Karp, The United States And The Soviet Union And The Control of Ballistic Missile Proliferation To The Middle East (New York: Institute for East-West Security Studies, 1989), 6-8.

<sup>&</sup>lt;sup>29</sup> Lee, *Smuggling Armageddon*, 4. According to Lee, the German intelligence agency *Bundesnachrichtendienst* reports higher numbers. Lee provides International Atomic Energy Agency (IAEA) reported numbers. The IAEA graphically depicts a lower number of incidents in its Incident and Trafficking Database factsheet. See: International Atomic Energy Agency, "IAEA Incident and Trafficking Database (ITDB) 2015 Fact Sheet," accessed 6 December 2015, http://www-ns.iaea.org/downloads/security/itdb-fact-sheet.pdf.

<sup>&</sup>lt;sup>30</sup> Thomas L. Friedman, *The Lexus and the Olive Tree* (New York: Farrar, Straus and Giroux, LLC, 1999), 15.

To be sure, some states remained—to a great extent—actors in the proliferation of nuclear arms. Pakistan became a nuclear state in 1998 with the *Chaghai-I* tests, driven in large part by Abdul Qadeer Khan. In addition to leading Pakistan into nuclear capability, Khan worked to proliferate nuclear capabilities to Iran, North Korea, and Libya. The United States fought a preventive war against Iraq, ostensibly to end nuclear proliferation activities in 2003. Fearing a similar invasion and after considerable coercion from the West, Libya abandoned its nuclear program later that same year. North Korea conducted its first nuclear weapons test in 2006. Although it was a *fizzle*—in which the subcritical masses of fissile material do not reach critical mass fast enough and "fizzle out" with a smaller than expected detonation that pushes the remaining material apart, it demonstrated their capability and ushered North Korea into the small club of nuclear-capable states. No

<sup>&</sup>lt;sup>31</sup> ePakNews.com, *Pakistan Announced Nuclear Power, Nawaz Sharif Announced Pakistan As Nuclear Power*, video, 2013, accessed January 1, 2016, https://www.youtube.com/watch?v=DQTGXxiQweA.

<sup>&</sup>lt;sup>32</sup> Abdul Qadeer Khan, "Nuclear Scientist Apologises – Text," *BBC News* (February, 4 2004), accessed 2 January, 2016, https://news.bbc.co.uk/2/hi/south\_asia/3459149.stm. It is worth noting that Khan later recanted his confession noting that it was made under duress as part of a kangaroo court. Declan Walsh, "Disgraced Atomic Scientist Disowns Confession," *The* Guardian (May 29, 2008), accessed January 1, 2016, https://www.theguardian.com/world/2008/may/30/pakistan.nuclear. See also: Abdul Qadeer Khan, "A.Q. Khan's Thirteen-Page Confession," *FoxNews.com* (September 15, 2011), accessed January 1, 2016, https://www.foxnews.com/world/2011/09/15/aq-khans-thirteen-page-confession.html.

<sup>&</sup>lt;sup>33</sup> AP Archive, *Powell decision on Iraq must come, comments on US-SKorea,* video, 2015, accessed January 3, 2016, https://www.youtube.com/watch?v=FuJdylHfr1o. Of course, critics have called into doubt the veracity of the claims about Iraq's proliferation activities. A study of the International Atomic Energy Agency's reports may prove useful to the reader. Mohamed El Baradei, The Status of Nuclear Inspections in Iraq: 14 February 2003 Update, *IAEA* (February 14, 2003), accessed January 2, 2016, https://www.iaea.org/newscenter/statements/status-nuclear/inspections-iraq-14-february-2003-update.

<sup>&</sup>lt;sup>34</sup> "Libya to give up WMD," *BBC News* (December 20, 2003), accessed January 2, 2016, https://news.bbc.co.uk/2/hi/3335965.stm.

<sup>&</sup>lt;sup>35</sup> John O'Neil and Normitsu Onishi, "U.S. Confirms Nuclear Claim by North Korea," *The New York Times* (October 16, 2006), accessed January 2, 2016, https://www.nytimes.com/2006/10/16/world/asia/17koreacnd.html.

Perhaps most notably, Iran's physical location positioned it at the geostrategic crux of transregional proliferation. Iran's proliferation activities originated in both Europe and Asia. As previously mentioned, Pakistan—and in particular the Khan network—provided significant aid to Iran. While some doubt remains on what Pakistan provided, it appears that at a minimum Pakistan provided basic components for enrichment and weaponry schematics and plans. Throughout the 1990s, the *Ministry of Atomic Energy of the Russian Federation* (MINATOM) extensively proliferated nuclear technology and missile components to Iran. Policymakers in the United States hoped that the 2004 reorganization of the Russian federal government—including a transition from MINATOM to the lower-level Federal Atomic Energy Agency—would arrest the Russian-Iranian nuclear trade. Such was not the case, unfortunately. In fact, the recent *Joint Comprehensive Plan of Action*, the United States brokered international agreement on the Iranian nuclear program, is the first real step to curb the military-capable nuclear program of Iran, although Russia will still provide civilian nuclear technology to the country.

Throughout the 1990s, though, new actors emerged. These actors often represented organized criminal networks. The Center for Strategic and International Studies cites the Russian Federation's Ministry of Internal Affairs (*Ministerstvo Vnutrennykh Del*, or MVD), stating that within Russian upwards of "forty percent of private business, sixty percent of state-owned

<sup>&</sup>lt;sup>36</sup> Khan, "Thirteen-Page Confession."

<sup>&</sup>lt;sup>37</sup> Fred Wehling, "Russian Nuclear and Missile Exports to Iran," *The Nonproliferation Review* 6, no. 2 (1999): 134-143.

<sup>&</sup>lt;sup>38</sup> Gabrielle Kohlmeier, "Putin Downsizes Russian Nuclear Agency," *Arms Control Today* (April 1, 2004), accessed January 2, 2016, https://www.armscontrol.org/act/2004\_04/Minatom.

<sup>&</sup>lt;sup>39</sup> "Russia resumes nuclear trade with Iran as sanctions lifted," *BBC News* (November 23, 2015), accessed January 3, 2016, https://www.bbc.com/news/world-europe-34899486; "Russians to start building Iran nuclear reactors," *Al Jazeera* (December 23, 2015), accessed January 3, 2016, https://www.aljazeera.com/news/2015/12/russia-start-building-iran-nuclear-reactors-151222131134565.html.

enterprises, and between fifty percent and eighty-five percent of banks are controlled by [organized crime]."<sup>40</sup> Of concern, former Director of Central Intelligence, James Woolsey, told a congressional panel that the Russian organized criminal networks had pervasively infiltrated the Russian government including the military, the *Sluzhba Vneshney Razvedki* (SVB, the successor to the KGB), and the ministries of interior and defense.<sup>41</sup> These government-criminal networks now had placement and access to acquire nuclear and radioactive material and connections across Europe and elsewhere to traffic it.

Some suggest that even during the 1990s, the criminal networks remained as actors subordinate to states in a two-level game. Dezider Ostragonic, an employee of one of the more notorious nuclear criminals, stated emphatically his belief that the Russian government was orchestrating all nuclear smuggling. 42 However, the evidence seems overwhelming that some criminals acted largely independent of states, including Ostragonic's employer, Aleksander Viktorovich Kuzin. Kuzin, purportedly a former KGB officer, orchestrated an international criminal network that attempted to traffic nuclear materials. 43 It is hard to imagine that Russia would allow a further weakening of its relative power thorough encouraging the proliferation of nuclear weapons to other states, at this time. As such, it seems logical that while states acted to acquire nuclear technology, the actors providing the capability were largely criminal networks seeking profit without fear of a loss of relative power on the international stage

<sup>&</sup>lt;sup>40</sup> William Webster, et al., "Russian Organized Crime," *Global Organized Crime Project* (Washington, DC: The Center for Strategic and International Studies, 1997), 4.

<sup>&</sup>lt;sup>41</sup> House Committee on Banking and Financial Services, *Russian Money Laundering*, 106th Cong., 1st sess., (1999).

<sup>&</sup>lt;sup>42</sup> Claire Sterling, *Thieves' World: The Threat of the New Global Network of Organized Crime* (Simon and Schuster, 1994), 217-218.

<sup>&</sup>lt;sup>43</sup> "Traffics d'uranium in Friuli," *Corriere Della Sera* (October 21, 1992), accessed January 23, 2016, http://archiviostorico.corriere.it/1992/ottobre/21/traffici\_uranio\_Friuli\_co\_0\_9210212539.shtml.

On the other side, facilitating the acquisition of materials, were the employees of Russia's Ministry of Atomic Energy (MinAtom) and related agencies, ministries, and companies.

Estimates on the size of the agency during the post-Soviet era range from one-hundred thousand employees to over a million. 44 These employees, as a rule, received poor compensation for their work. While military personnel in the *Twelfth Department* of the Ministry of Defense (for nuclear security) were paid twice the Russian average (\$335 per month compared to \$160 per month), the average employee at critical research and weapons design facilities—including Chelyabinsk-70—earned a meager fifty dollars per month. 45 As such, many of these employees turned elsewhere to supplement their meager earnings. Theft and trafficking of nuclear materials promised quick riches. A kilogram of highly enriched uranium could fetch a price of up to sixty million dollars. In a sting operation, the German Federal Intelligence Service (*Bundesnachrichtendienst* or BND) offered suppliers \$276 million for four kilograms of plutonium. 46 The poor wages, high potential payoff, and loose regulatory oversight resulting from corruption and disorganization, created conditions where employees just may have been willing to consider entering the nuclear black market.

The tragic story of Vladimir Nechai highlights the plight of Russia's nuclear employees following the break-up of the USSR. Nechai headed the Russian nuclear research center Chelyabinsk-70 and on 31 October 1996 killed himself. The research facility had fallen on financial problems—endemic of Russian businesses and government agencies. Pay for the 16,000 workers dropped to as low as \$30 per month. One deputy director at the facility commented after

<sup>&</sup>lt;sup>44</sup> Oleg Bukharin, "Technical Aspects," *The Nuclear Challenge in Russian and the New States of Eurasia*, ed. George Quester (Armonk, NY: M.E. Sharpe, Inc, 1995), 57. See also Lee, *Smuggling Armaggedon*, 6.

<sup>&</sup>lt;sup>45</sup> Lee, *Smuggling Armageddon*, 38.

<sup>&</sup>lt;sup>46</sup> Ibid., 42-43.

Nechai's death, that financial concerns of the plant aggravated the director's depression.<sup>47</sup> It remains easy to see how alluring the nuclear black market was to a down-on-his-luck employee, he just required the right push from nefarious actors.

As a result of the rise of organized crime syndicates and depressed conditions within Russia's nuclear agencies, nuclear smuggling became prevalent. Criminals saturated the black market in the early and mid-nineties. Smuggling peaked in either 1994 or 1995. According to a list compiled from open-source materials, there were fifty-three smuggling attempts in 1994 and twenty-six attempts in the following year in the wider Black Sea area. The German Federal Criminal Police (BKA) recorded 182 cases of illegal trafficking in nuclear materials in 1994 and 123 the following year. The *Bundesnachrichtendienst* reported 124 and 177, and the International Atomic Energy Agency (IAEA) reported forty-five and twenty-seven in 1994 and 1995 respectively. Regardless of which data set is correct, the incidents highlight the willingness of criminals to engage in the smuggling of nuclear materials, the perceived payout, and the inability of national and international regulatory and law enforcement organizations to stop them.

In summary, the proliferation activities in the post-Soviet era shifted from strictly existing in the realm of states to providing a means for capital and prestige to criminal networks.

Some state actors continued to work towards proliferation, notably Pakistan, Iran, Iraq, and North Korea. Many of these countries, however, came to rely on criminal networks to provide

<sup>&</sup>lt;sup>47</sup> Michael Gordon, "A Top Russian Nuclear Scientist Kills Himself," *The New York Times* (November 1, 1996), accessed January 23, 2016, http://www.nytimes.com/1996/11/01/world/a-top-russian-nuclear-scientist-kills-himself.html.

<sup>&</sup>lt;sup>48</sup> Alex Schmid and Charlotte Spencer-Smith, "Illicit Radiological and Nuclear Trafficking, Smuggling and Security Incidents in the Black Sea Region since the Fall of the Iron Curtain – an Open Source Inventory," *Perspectives on Terrorism* 6, no. 2 (2012). While Schmid and Spencer-Smith never explicitly define the Black Sea region, the reported events include incidents in or involving countries extending well beyond those immediately bordering the Black Sea.

<sup>&</sup>lt;sup>49</sup> Lee, Smuggling Armageddon, 3-4.

information and materials. The surge in incidents in the mid-nineties represents the ease of access, boldness, and—in some instances—desperation of these criminals. Technologies previously available only to Warsaw Pact and North Atlantic Treaty Organization countries became widely available to criminals, rogue states, and other actors. Compounding such threats was the lag between proliferation and the United States' recognition and response. Without a doubt, the growth of proliferation and smuggling activities created a complex problem for the international community and an existential threat to the United States.

# Counterproliferation

The United States approached the threat of transregional nuclear proliferation through unified action. While traditionally, political and diplomatic efforts comprised the bulk of the United States' efforts to deal with proliferation, the Department of Defense fulfilled an increasingly large role in the post-Soviet era. Eventually, the department assumed the leading role in synchronizing the country's counterproliferation efforts. *Counterproliferation* refers to the activities of the Department of Defense across the full range of U.S. efforts to combat proliferation, including diplomacy, arms control, export controls, and intelligence collection and analysis, with particular responsibility for assuring U.S. forces and interests can be protected should they confront an adversary armed with weapons of mass destruction or missiles. Whereas, *nonproliferation* is defined as the use of the full range of political, economic, and military tools to prevent proliferation reverse it diplomatically or protect our interests against an opponent armed with weapons of mass destruction or missiles, should that prove necessary. <sup>51</sup> By studying the legislative- and executive-mandated counterproliferation activities, the increasing importance of

<sup>&</sup>lt;sup>50</sup> Gordon Boezer, *IDA Document D-1411: The Operational Implications of Proliferation* (*U*) (Alexandria, VA: Institute for Defense Analyses, 1993), I-1.

<sup>&</sup>lt;sup>51</sup> Deutch, *Report on Nonproliferation and Counterproliferation*, 1.

the military becomes important. The strategic guidance demonstrates the shifting attitude within the department about counterproliferation approaches. To keep pace with the shifting approaches, the department restructured several times—creating a new senior executive service position to oversee department-wide efforts, shifting geographic combatant command boundaries, establishing a new functional combatant command and eventually granting it primacy in counterproliferation activities, further consolidating counterproliferation approaches in a combat support agency, amongst other efforts. Further, the department created a universal counterproliferation and counter-weapons of mass destruction contingency plan, requiring each combatant command to create supporting plans. All of these efforts required more than a decade of evolution, but have created a coherent counterproliferation approach that remains vital to today's national security interests.

The early 1990s created an environment of uncertainty for US national security strategy. As the Soviet Union dissolved, congress stepped-in to provide guidance designed to overcome that uncertainty and directed the Department of Defense to assume certain tasks related to the denuclearization of the former Soviet Union. The Soviet Nuclear Threat Reduction Act of 1991 directed the military to fund and coordinate the United States' facilitation of the destruction of nuclear weapons in the Soviet Union, its republics, and successor entities. The military retained a key mission to provide tactical and theater ballistic missile defense. The National Defense Authorization Act for 1994 directed the Department of Defense to chair an interagency committee on nonproliferation. In addition to these explicitly stated tasks related to

<sup>&</sup>lt;sup>52</sup> Soviet Nuclear Threat Reduction Act, 1991, Public Law 102-228, 102nd Cong., 1st. Sess. (December 21, 1991), accessed February 12, 2016, https://www.gpo.gov/fdsys/pkg/STATUTE-105/pdf/STATUTE-105-Pg1691.pdf. See also: Cooperative Threat Reduction Act, 1993, Title XII, Public Law 103-160, 103rd Cong., 1st. Sess. (November, 30, 1993), accessed February 12, 2016, https://www.gpo.gov/fdsys/pkg/BILLS-103hr2401enr/pdf/BILLS-103hr2401enr.pdf.

 <sup>53</sup> Strategic Defense Initiative Organization, *Theater Missile Defense Report to Congress* 30 March 1991 (Washington, DC: Department of Defense, 1991), 1.

counterproliferation, the military derived authorities from various strategic document including the national security strategy, the Department of Defense's bottom-up review and subsequent report, and unified campaign plans.

The National Security Strategy of 1994 calls for deterrence against attack through retaliatory capabilities and increased capabilities to locate, identify, and disable arsenals of nuclear weapons. <sup>55</sup> The military designed a retaliatory capability to dissuade and deter adversaries from seeking to use nuclear weapons against the United States or its allies. However, as the document points out, the United States must possess a capability to prevent and not just deter the threat. This need gave rise to the requirement to locate, identify, and disable. The following year's National Security Strategy echoes the requirements and then provides an example of an interagency action that resulted in the safeguarding of 600 kilograms of nuclear material from Kazakhstan. The Departments of Defense and Energy retrieved the material and transferred it to the United States for storage. Further, it highlights US efforts to assist the Russian Federation with control and accountability of nuclear material and the conversion of highly-enriched uranium into reactor fuel, purchased by the United States. <sup>56</sup> These actions represent successes of the Nunn-Lugar Cooperative Threat Reduction program—the successor to the Soviet Nuclear Threat Reduction program—and demonstrate the large role that the Department of Defense played in addressing the threat of proliferation.

<sup>&</sup>lt;sup>54</sup> National Defense Authorization Act, 1994, Title XVI, Public Law 103-160, 103rd Cong., 1st. Sess. (November, 30, 1993), accessed February 12, 2016, https://www.gpo.gov/fdsys/pkg/BILLS-103hr2401enr/pdf/BILLS-103hr2401enr.pdf.

<sup>&</sup>lt;sup>55</sup> William Clinton, *A National Security Strategy of Engagement and Enlargement* (Washington, DC: The White House, July 1994), 11-12. The National Security Strategy of 1994 is representative of the early post-Soviet period and was chosen as 1994 represented the peak of nuclear smuggling in the 1990s.

<sup>&</sup>lt;sup>56</sup> William Clinton, *A National Security Strategy of Engagement and Enlargement* (Washington, DC: The White House, February 1995), 13-14.

Interestingly, the National Military Strategy remains largely quiet on the military's role in countering proliferation, during this time. The National Military Strategy of 1992 mentions the threat of proliferation, but makes no overtures about counterproliferation. Instead, it continues Cold War-era talk about the importance of the expansion of the Strategic Defense Initiative to provide Global Protection Against Limited Strikes.<sup>57</sup> In 1995, at the height of criminal proliferation—and following the Secretary of Defense's claims that proliferation presented the clearest threat to US national security and that the Department of Defense was expanding counterproliferation efforts—the National Military Strategy remained focused retaliatory strikes as deterrence.<sup>58</sup> Finally, in 1997, the National Military Strategy dictates that "US forces must have a counterproliferation capability balanced among the requirements to prevent the spread of WMD," listing several of the key tasks associated with such prevention.<sup>59</sup> This notable delay in discussing counterproliferation in the National Military Strategy represents one of several possibilities. One possibility was a disconnect between the national command authority and senior military advisors (i.e., the Joint Chiefs of Staff). It is widely accepted that President Clinton maintained a contentious relationship with military leaders, particularly early in his administration.<sup>60</sup> Another possibility is that military leaders felt counterproliferation was an unconventional operation to be conducted by specialized organizations, agencies, and commands.

<sup>&</sup>lt;sup>57</sup> Colin Powell, *National Military Strategy*, *1992* (Washington, DC: Government Printing Office, January 1992), 6-7.

<sup>&</sup>lt;sup>58</sup> John Shalikashvili, *National Military Strategy, 1995* (Washington, DC: Government Printing Office, 1995), 15.

<sup>&</sup>lt;sup>59</sup> John Shalikashvili, *National Military Strategy*, *1997* (Washington, DC: Government Printing Office, 1997), 26.

<sup>&</sup>lt;sup>60</sup> Jane Perlez, "For 8 Years, a Strained Relationship With the Military," *The New York Times* (December 28, 2000), accessed February 13, 2016, http://www.nytimes.com/2000/12/28/us/for-8-years-a-strained-relationship-with-the-military.html?pagewanted=all.

Regardless, the notable lack of discussion within the National Military Strategy represents a lack of coherence in the military's response to such a grave threat.

While these documents outlined requirements that the Department of Defense carried, they do not provide much insight on how the department executed them. Not until 2001, did the Department of Defense produce a coherent strategy for countering proliferation and weapons of mass destruction. The document outlines the ends, ways, and means that the military would apply to counter proliferation to prevent the use of weapons of mass destruction, enhanced nonproliferation activities to prevent proliferation, and consequence management activities in the event that an adversary deployed and used a nuclear weapon against US interests. The document also highlights that counterproliferation and countering weapons of mass destruction requires a whole-of-government approach and is not limited to the Department of Defense, regardless of its outsized role. Prior to this document, the Department of Defense had no overarching counterproliferation strategy and needed to build mechanisms that enabled the integration across geographic combatant commands, field agencies, and other organizations.

In an effort to meet the evolving statutory requirements that the US Congress and the executive requirements that the president placed upon it, the Department of Defense began a series of structural and organizational changes. One of the first structural changes came in 1996, when the Department of Defense realized that it needed to integrate its counterproliferation efforts better, and so it established the Counterproliferation Council. The Counterproliferation Council—chaired by the Deputy Secretary of Defense and comprising numerous

<sup>&</sup>lt;sup>61</sup> S.A. Fry, *Counterproliferation Strategy, 22 February 2001* (Washington, DC: Office of the Chairman of the Joint Chiefs of Staff, 2001); Peter Pace, *National Military Strategy to Combat Weapons of Mass Destruction, 13 February 2006* (Washington, DC: Office of the Chairman of the Joint Chiefs of Staff, 2006). The original document, produced by the director of the Joint Staff, received an update from the Chairman of the Joint Chiefs of Staff five years later. The latter version is more complete and comprehensive.

<sup>&</sup>lt;sup>62</sup> Ibid., Foreword.

undersecretaries, assistant secretaries, military officers, and others—held a charter to "ensure that the Department of Defense's implementation of [counterproliferation] efforts is, in fact, integrated and focused."<sup>63</sup> To this end, the Counterproliferation Council was to oversee the Department of Defense's efforts to apply "technical, military, and intelligence expertise to arms control, export controls, inspection, monitoring, interdiction, and related activities."<sup>64</sup> The creation of the Counterproliferation Council further advanced the visibility given to counterproliferation granted by the establishment of the Assistant Secretary position. This council ensured that members of the department of defense treated with gravity counterproliferation and provided the Deputy Secretary and Assistant Secretary for International Security Policy a forcing function to ensure integration and coordination.

In a departure from most of the previously mentioned strategic guidance produced during the 1990s that remained light on means, the *Department of Defense Annual Report to the President and Congress* in 1994 (based largely on the previous year's Bottom-Up Review) by Secretary of Defense Les Aspin, outlined the department's new counterproliferation initiative. This new initiative included improved intelligence, increased ability to destroy, seize, and disable arsenals, and improved technologies to detect weapons transported covertly—as well as additional organizational changes. <sup>65</sup> This initiative represented a significant increase in the role that the Department of Defense played in addressing proliferation, fulfilling one of its fundamental goals: "to strengthen [the department's] contribution to government-wide efforts to

<sup>&</sup>lt;sup>63</sup> John White, *Department of Defense Directive 2060.2* (Washington, DC: The Department of Defense, July 9, 1996), 1.

<sup>&</sup>lt;sup>64</sup> Ibid., 4.

Government Printing Office, January 1994), 6. Interestingly, the report also lists proliferation first amongst the *four dangers* facing US national security and mentions that the Bottom-Up Review in 1993 identified proliferation as the primary threat to US security. See also Les Aspin, *Report on the Bottom-Up Review*, 1993 (Washington, DC: Department of Defense, October, 1993). Other writers may discuss Aspin's *Defense Counterproliferation Initiative* alluded to in speeches in 1994; however, the *Annual Report* actually represents the initiative in writing.

prevent the acquisition of these weapons...or reverse it."66 While the annual report remains general, it does specify one critical action that the Department of Defense took—the creation of a new Assistant Secretary of Defense for Nuclear Security and Counterproliferation within the Office of the Secretary of Defense (Policy). The role of this new Assistant Secretary was to provide increased "focus, visibility, and resources to DoD's efforts in countering proliferation."67 Two years later, a directive established an Assistant Secretary of Defense for International Security Policy, combining and subsuming the separate roles of Assistant Secretary of Defense for Nuclear Security and Counterproliferation and the Assistant Secretary of Defense for Policy and Plans and broadening the role's powers.<sup>68</sup> The Secretary's Annual Report outlined several important steps that the Department of Defense took to meet its mandated statutory role and further represented the increased role directed by the national command authority.

In addition to the organizational changes at the department level, the department authorized increased authorities that resulted in organizational changes at the Joint Staff and combatant commands. In addition to establishing the Counterproliferation Council, *Department of Defense Directive 2060.2* broadened the powers of the Joint Staff in the execution of counterproliferation activities, authorizing the Chairman of the Joint Chiefs of Staff to issue guidance to the unified combatant commanders on counterproliferation as well as to make recommendations on counterproliferation in unassigned geographic areas. <sup>69</sup> The first of these authorities allowed synchronization and integration of the counterproliferation effort while the second remained important as far as most of the former Soviet bloc countries remained

<sup>&</sup>lt;sup>66</sup> Ibid., 35.

<sup>&</sup>lt;sup>67</sup> Ibid., 39.

<sup>&</sup>lt;sup>68</sup> John Deutch, *Department of Defense Directive 5111.05* (March 22, 1995).

<sup>&</sup>lt;sup>69</sup> White, Department of Defense Directive 2060.2, 6.

unassigned to a geographic combatant command. Historically, the Joint Staff maintained responsibility for the Soviet Union.

Debate continued for fifteen years on the inclusion of the Soviet Union into a geographic combatant command's area of responsibility. In 1982, the US Army's Deputy Chief of Staff for Operations urged the joint staff to review the Single Integrated Operational Plan and Unified Command Plan. 70 President Kennedy adopted the original Single Integrated Operational Plan (SIOP-62) in 1961 as the overarching plan for the conduct of nuclear war. To this day the plan remains classified, despite going through multiple iterations and updates, and ultimately being replaced by operations and contingency plans. 71 The Army's Deputy Chief of Staff made his urging in light of the integration of special operations forces on-going during the 1980s; however, he urged no change in the regional assignments of the Soviet Union, China, or North Korea, notably advocating that the chief communist threats remain under joint staff purview.<sup>72</sup> The following decade brought significant change again prompting planners to ask about the regional alignment of the now-former Soviet Union. President George H.W. Bush authorized the establishment of the US Strategic Command during a speech on September 27, 1991. 73 That same day the Commander of the Strategic Air Command, which would become the new Strategic Command, immediately attempted to expand the powers of his forming command. General Butler sent a proposal that the Joint Staff relinquish geographical responsibility for the former Soviet Union to his new command. 74 The Joint Staff rejected the plan out of hand. By 1995, the question

<sup>&</sup>lt;sup>70</sup> Edward J. Drea et al., *History of the Unified Command Plan 1946-2012* (Washington, DC: Joint History Office – Office of the Chairman of the Joint Chiefs of Staff, 2013), 49.

<sup>&</sup>lt;sup>71</sup> Scott D. Sagan, "SIOP-62: The Nuclear War Plan Briefing to President Kennedy," *International Security* 12, no. 1 (1987): 22-51, 22.

<sup>&</sup>lt;sup>72</sup> Drea, *Unified Command Plan*, 49.

<sup>&</sup>lt;sup>73</sup> Headquarters, US Strategic Command, *History of the United States Strategic Command* (Offutt Air Force Base, NE: United States Strategic Command, 2004), 16.

<sup>&</sup>lt;sup>74</sup> Drea, *Unified Command Plan*, 65.

of including former Soviet states into regional combatant commands again arose. The commanders of the US Pacific Command and US Central Command advocated for joint staff retention of responsibility while the commander of US Atlantic Command recommended assigning countries as they joined the Partnership for Peace program. The US Strategic Command commander advocated assigning Ukraine, Belarus, and Kazakhstan only after they became non-nuclear states. This issue remained unresolved for an additional two years when the Director of the Joint Staff's directorate for strategic plans and policy recommended a gradual assignment of some former Soviet countries in the following Unified Command Plan. As such, the Joint Staff assigned Ukraine, Belarus, Moldova, Georgia, Armenia, and Azerbaijan—the Western Slavic and Caucasus states—to US European Command. Simultaneously, they assigned the five Turkestan states—Kazakhstan, Uzbekistan, Turkmenistan, Tajikistan, and Kyrgyzstan—to US Central Command. The Russian Federation, however, would remain unassigned until 2002, when the Joint Staff assigned it to US European Command.

Maintaining Joint Staff oversight of the newly independent states allowed the Department of Defense to better coordinate and integrate responses to nuclear proliferation threats. The combatant commanders initially opposed assigning the former Soviet states to a combatant command for fear of resource shortfalls. If one combatant command maintained responsibility, they worried that their respective command would be disadvantaged in relation. As such, the commanders acquiesced to the Joint Staff oversight of the newly independent states until 1998.

<sup>&</sup>lt;sup>75</sup> Ibid., 73.

<sup>&</sup>lt;sup>76</sup> Dennis C. Blair, *Memorandum: Implementation of the Unified Command Plan* (Washington, DC: Office of the Chairman of the Joint Chiefs of Staff, February 9, 1998), 7; Drea, *Unified Command Plan*, 75.

<sup>&</sup>lt;sup>77</sup> William C. Story, "Military Changes to the Unified Command Plan: Background and Issues for Congress," *CRS Report for Congress* (Washington, DC: Congressional Research Service, 1999), 13.

This higher-level oversight came with costs, though. The Joint Staff remained under resourced relative to the combatant commands. One officer was responsible for overseeing military cooperation with Ukraine; whereas if a combatant command gained responsibility, a more robust staff would assume the responsibility. Similarly, resource allocation meant that the Joint Staff would have to request support from the combatant commands and other agencies with requisite resources. Further, the established military structure prevented the Joint Staff from being able to order any combatant command to assist (the Chairman of the Joint Chiefs of Staff is the principle military advisor to the President and the Secretary of Defense and does not command military assets). As such, it appears that the Joint Staff maintaining regional responsibility for the former Soviet states provided a short-term benefit in synchronizing and integrating counterproliferation efforts therein, while the later assignment to geographic combatant commands provided long term continuity and capability to maintain programs that the Joint Staff began.

In addition to the regional responsibilities that the Geographic Combatant Commanders held, the Joint Staff granted increasing responsibilities to the US Strategic Command for countering threats posed by nuclear actors and proliferation. Notably, the Unified Command Plan 2004 designated US Strategic Command as the supported command, responsible for synchronizing and integrating operations to counter weapons of mass destruction. One Strategic Command maintained responsibility to integrate and synchronize applicable Department of Defense-wide efforts across the doctrine, organization, training,

<sup>&</sup>lt;sup>78</sup> Leonid I. Polyakov, *U.S.-Ukraine Military Relations and the Value of Interoperability* (Carlisle, PA: Strategic Studies Institute, 2004), 26-27.

<sup>&</sup>lt;sup>79</sup> Drea, *Unified Command Plan*, 93-94; Jerome V. Martin, *The US Strategic Command Reorganization*, 2004-2006: A Chronology (Offutt Air Force Base, NE: US Strategic Command History Office, 2010), 8.

material, leadership, personnel, and facilities spectrum" of countering weapons of mass destruction and proliferation.<sup>80</sup>

The change appears to result from the 2003 Operation Iraqi Freedom. A large part of the case for war centered around countering Saddam Hussein's attempts to proliferate nuclear weapons. <sup>81</sup> Unfortunately, the operation called into question the United States' ability to locate and eliminate such weapons. After initially dissatisfying findings, the Department of Defense formed an ad hoc group—the Iraq Survey Group, a 1400-member organization that operated in support of the Central Intelligence Agency. <sup>82</sup> Concomitantly, the Secretary of Defense directed further actions to improve the department's ability to counter proliferation, resulting in the Defense Threat Reduction Agency assuming the role of US Strategic Command's Center for Combating Weapons of Mass Destruction in 2006. <sup>83</sup> This action collocated the defense and combat support agency with a joint force component command within the functional combatant command that owned responsibility for countering proliferation. The reorganization finally shifted the department's programs from a unity of effort to a unity of command.

<sup>&</sup>lt;sup>80</sup> Pace, Strategy to Combat Weapons of Mass Destruction, 19.

Robert D. Walpole, *National Intelligence Estimate 2002-16HC: Iraq's Continuing Programs for Weapons of Mass Destruction* (Washington, DC: National Intelligence Center, 2002), accessed March 13, 2016, http://nsarchive.gwu.edu/NSAEBB/NSAEBB129/nie.pdf; George W. Bush, *President Bush Outlines Iraqi Threat: October 7, 2002* (Washington, DC: The White House Office of the Press Secretary, 2002), accessed March 13, 2016, http://nsarchive.gwu.edu/NSAEBB/NSAEBB80/new/doc%2012/President%20Bush%20Outlines%20Iraqi%20Th reat.htm; Colin L. Powell, *Remarks to the United Nations Security Council: February 5, 2003* (Washington, DC: US Department of State, 2003), accessed March 13, 2016, http://nsarchive.gwu.edu/NSAEBB/NSAEBB80/new/doc%2023/Remarks%20to%20the%20United%20Nations%20Security%20Council.htm.

<sup>&</sup>lt;sup>82</sup> James Risen, "US Asks Ex-UN Inspector to Advise on Arms Search," *The New York Times* (June 12, 2003), accessed March 13, 2016, http://www.nytimes.com/2003/06/12/international/worldspecial/12WEAP.html.

<sup>&</sup>lt;sup>83</sup> Zack Cannon and Chris Kwan, "Center of Gravity," *The Shield* 1, no. 4 (2012): 24-31, 26.

The Defense Threat Reduction Agency already held an important role in countering proliferation. Today, it remains as the successor of the Manhattan Engineering District (Manhattan Project), through several intermediary organizations including the Armed Forces Special Weapons Project, the Defense Atomic Support Agency, and the Defense Nuclear Agency. Agency. Initially, these agencies focused on the research and development, acquisition, and storage of nuclear weapons and their components. Throughout the organizations' histories, however, their responsibilities grew. The 1995 restructuring created the Defense Special Weapons Agency, which carried as part of its charter the responsibility to execute projects of the Cooperative Threat Reduction Program. The Defense Special Weapons Agency shortly transitioned to the Defense Threat Reduction Agency in 1998. This transition saw further additions to the agency's charter, focused on counterproliferation. The growth of the agency's counterproliferation roles made it the logical choice to become the Center for Combatting Weapons of Mass Destruction.

In addition to the organizational changes and empowering of combatant commands, the Joint Staff created overarching plans to address specific threats, including one critical effort to counter proliferation, which was the creation of Concept Plan 0400. Concept Plan 0400 defined the military aspects of national level counterproliferation policy in terms of operational objectives and associated tasks, directing combatant commanders to develop regional-specific plans and helping to focus those efforts. <sup>87</sup> The contingency plan discussed all available means—including counterforce, active defense, passive defense, and consequence management—to mitigate the

<sup>&</sup>lt;sup>84</sup> Defense Threat Reduction Agency, *Defense's Nuclear Agency: 1947-1997* (Washington, DC: Defense Threat Reduction Agency, 2002), i.

<sup>85</sup> Ibid., 441.

<sup>86</sup> Ibid., 323-324.

<sup>&</sup>lt;sup>87</sup> Counterproliferation Program Review Committee, *Report on Activities and Programs* for Countering Proliferation (Washington, DC: Government Publishing Office, 1996), ES-3, 29.

threat of nuclear weapons to US interests. <sup>88</sup> By 1999, all of the combatant commands had developed and gained approval for their regional-specific plans. <sup>89</sup> A Government Accountability Office investigation in 2000 found that while the Department of Defense had taken positive steps towards institutionalizing counterproliferation into all facets of military operations more work remained to integrate and focus the department's response to the growing threat posed by the proliferation of nuclear weapons. <sup>90</sup> The Department of Defense responded with a new version of Concept Plan 0400 which sought to integrate further counterproliferation efforts. Additionally, the updated plan included a new section on US military assistance to foreign governments during consequence management actions. While the new section remained unclassified during publication, the base plan remains classified. As such, this foreign consequence management section provides important insights into the integration efforts conducted at the Joint Staff and combatant command levels. <sup>91</sup>

Interestingly, even the numbering of the contingency plan hints at how the Joint Staff's synchronization efforts evolved over time. Plans carry a unique four-digit identifier, generally suffixed with a two-digit year. The four-digit identifier further provides insight into the supported commands. Plans carrying identifiers 0001 through 0999 belong to—and fall under the purview

<sup>&</sup>lt;sup>88</sup> William S. Cohen, *Proliferation: Threat and Response* (Washington, DC: Office of the Secretary of Defense, 2001), 78.

<sup>&</sup>lt;sup>89</sup> Counterproliferation Program Review Committee, *Report on Activities and Programs* for Countering Proliferation and NBC Terrorism (Washington, DC: Government Publishing Office, 2000), ES-3

<sup>&</sup>lt;sup>90</sup> Norman J. Rabkin, Weapons of Mass Destruction: DOD's Actions to Combat Weapons Use Should Be More Integrated and Focused (Washington, DC: Government Accountability Office, 2000), 6.

<sup>&</sup>lt;sup>91</sup> John P. Abizaid, *CJCS CONPLAN 0400-00 (U)* (Washington, DC: Office of the Chairman of the Joint Chiefs of Staff, 2002), T-6 – T-17.

of—the Joint Chiefs of Staff. <sup>92</sup> As such, Concept Plan 0400 indicates that the Joint Staff maintained coordinating responsibility as the supported command for its implementation. The geographic and functional combatant commands' supporting plans would carry the same identifier, establishing a degree of unity of command and effort. Concept Plan 0400 received two more updates, first in 2004, and again in 2006. Interestingly and concurrently with the US Strategic Command's growth of responsibilities, the Joint Staff relinquished responsibility for the Concept Plan 0400 in 2006 to the US Strategic Command and issued a new four-digit identifier: 8099. <sup>93</sup>

While the US Strategic Command became responsible for coordinating much of the activities to counter proliferation and while the geographic combatant commands each had contingency plans to support those efforts, these organizations generally lacked capability. An important component of the military's counterproliferation efforts is an ability to take action against known or suspected actors proliferating nuclear material. These activities carried high political and physical risk and, as such, tactical execution of offensive counterproliferation nested well within the US Special Operations Command's mission set. While each combatant s responsible for developing plans that support Concept Plan 0400/8099, the US Special Operations Command received additional, specific guidance and authorities. *Department of Defense Directive 2060.2* directed the commander of the US Special Operations Command to "organize, train, equip, and otherwise prepare US special operations forces to conduct operations in support

<sup>&</sup>lt;sup>92</sup> William Arkin, "National Security Contingency Plans of the U.S. Government," Supplement to *Code Names: Deciphering U.S. Military Plans, Programs, and Operations in the 9/11 World* (Hanover, NH: Steerforth Press, 2005), 3, accessed February 24, 2016, https://williamaarkin.files.wordpress.com/2012/02/arkins-contingency-plans-of-the-us-government.pdf.

<sup>&</sup>lt;sup>93</sup> James Tegnelia, *Combating WMD: Joint CBRN Conference 2006, Fort Leonard Wood*, accessed February 24, 2016, http://www.dtic.mil/ndia/2006cbrn/tegnelia.pdf; Arkin, "Contingency Plans," 3. Plans with identifier numbers 8000-8999 belong to US Strategic Command.

of US government [counterproliferation] objectives."<sup>94</sup> These rather broad authorities and responsibilities have provided significant latitude for the US Special Operations Command craft offensive counterproliferation approaches to support the larger Department of Defense strategy.

Extrapolation from other documents hints at the counterproliferation roles of the US Special Operations Command. The Deputy Secretary of Defense in 1998 allocated eighty-seven million dollars over the Future Years Defense Plan to the command for counterproliferation programs. Whereas other counterproliferation funds were specifically earmarked by the program (i.e., counterforce and passive defense), the generic allocation to the US Special Operations Command remained noncommittal to allow maximum flexibility to "enforce US counterproliferation policy long before the authorization of direct military action" including measures to interdict shipments, provided deep reconnaissance to located nuclear material, and conduct precision strikes to capture or neutralize them. 95 Further, the Counterproliferation Program Review Committee identified areas for capability enhancement in 1998 and included both overcome and existing shortfalls. The fifth priority area of capability enhancement was "support for special operations forces and defense against paramilitary, covert delivery, and terrorist NBC threats."96 The areas in which the military had made progress included specialized assault and breaching equipment (for accessing nuclear targets in hardened or deep-buried structures) and improved nuclear detection in urban environments (allowing the US Special Operations Command an improved ability to locate, tag, and track targets). The capability shortfalls still existing in 1998 included the detection and safeing [sic] of nuclear weapons and

<sup>&</sup>lt;sup>94</sup> White, Department of Defense Directive 2060.2, 7.

<sup>&</sup>lt;sup>95</sup> Counterproliferation Program Review Committee, *Report on Activities and Programs for Countering Proliferation and NBC Terrorism* (Washington, DC: Government Printing Office, 1998), ES-5.

<sup>&</sup>lt;sup>96</sup> Counterproliferation Program Review Committee, *Report on Activities and Programs* (1998), 9-3.

devices, neutralization of nuclear infrastructure, and extended range operations. <sup>97</sup> Taken as a whole, it appears that the envisioned role of the US Special Operations Command remains to conduct the operational and tactical actions required for countering proliferation, predominately through direct action.

The US Special Operations Command's primacy at the tactical level of counterproliferation has led to an increased role in the overall integration of the United States' efforts to combat nuclear weapons. While US Strategic Command retains the assigned mission for counterproliferation, the US Special Operations Command has increased its relevance as evidenced by its co-authorship of the 2002 *Counterproliferation Operational Architecture*. 98

The 2002 Unified Command Plan authorized both US Strategic Command and US Special Operations Command to serve as supported commands for limited operations, allowing them to lead, plan, and synchronize global functions and operations. Given the transregional nature of proliferation and terrorism, it logically follows that the Secretary of Defense would direct the two commands to take lead roles for both problem sets. Further, as a supported command for combating terrorism, the US Special Operations Command will undoubtedly find itself synchronizing and integrating counterproliferation efforts—given the high potential for a terrorist organization to attempt to acquire and use nuclear weapons or material. <sup>99</sup> The

<sup>&</sup>lt;sup>97</sup> Counterproliferation Program Review Committee, *Report on Activities and Programs* (1998), 9-3.

<sup>&</sup>lt;sup>98</sup> US Strategic Command and US Special Operations Command, *Counterproliferation Operational Architecture* (Washington, DC: Office of the Chairman of the Joint Chiefs of Staff, 2002).

<sup>&</sup>lt;sup>99</sup> Peter Gillette, "The 2002 Unified Command Plan: Changes and Implications," *National Security Watch* 3, no. 2, (2003): 1-8, 1, accessed March 14, 2016, http://www.ausa.org/SiteCollectionDocuments/ILW%20Web-ExclusivePubs/National%20Security%20Watch/NSW\_03-2.pdf; House Armed Services Committee, Subcommittee on Terrorism, Unconventional Threats and Capabilities, Statement by Marshall Billingslea, "Special Operations Forces Acquisition," April 1, 2003, accessed March 14, 2016, http://www.dod.mil/dodgc/olc/testimony\_old/108\_first.html.

employment of special operations forces may not always be appropriate; however, the suite of capabilities ensures a usefulness for counterproliferation planning particularly special reconnaissance, combating terrorism, and the ability to seize and secure deep underground facilities.<sup>100</sup>

Accordingly, the role of the US Special Operations Command has increased relative to counterproliferation. Conducting tactical and operational activities has required it increasingly to provide synchronization and integrating functions, while not usurping the role of the US Strategic Command. The formalization of the latter's role in the Unified Command Plans cements its relevance as the lead integrator for counterproliferation.

### Conclusion

The US Department of Defense moved slowly towards an improved architecture that would better synchronize and integrate its efforts to counter proliferation of nuclear weapons following the dissolution of the Soviet Union and the subsequent rapid establishment of a black market for nuclear material. Important organizational changes created additional oversight and flexibility in responding to proliferation threats. These changes included significantly altering the unified command plan to establish an ultimately supported functional combatant command and subordinate combat support agency that maintained responsibility for the all counterproliferation efforts, allowing another functional combatant command to synchronize limited counterproliferation efforts at the tactical level, creating an overarching strategy and contingency plans that addressed generic and specific threats, and the establishment of a senior executive service position to oversee all operations and hold the military accountable. These restructurings and changes streamlined the department's ability to respond, clarified expectations, and

<sup>&</sup>lt;sup>100</sup> Lee A. van Arsdale, *US Special Operations Forces and the Counterproliferation of Weapons of Mass Destruction* (Carlisle, PA: US Army War College Strategy Research Project, 1997), 12. In addition to describing the role of special operations forces, van Arsdale provides several potential scenarios concerning counterproliferation.

established clear roles for the combatant commanders and supporting agencies in addressing this relatively new threat. The critical and ultimate differentiator from the beginning of its efforts to counter proliferation and the end result was a move from unity of effort to unity of command. <sup>101</sup>

By the mid-2000s—after nearly a decade and a half, the architecture was mostly set.

Additional changes, however, remain ongoing to enhance further the department's responses to proliferation. As an example, a newly established headquarters, the Standing Joint Force Headquarters for Elimination, reached full operational capacity. This headquarters is a deployable organization capable of augmenting an existing headquarters to form the core of a joint task force headquarters to control, defeat, disable, and dispose of an adversary's weapons of mass destruction during the execution of plans supporting Concept Plan 8099. In keeping with the emphasis on unity of command, this new headquarters is subordinate to the US Strategic Command's Center for Combating Weapons of Mass Destruction. <sup>102</sup>

This monograph remains limited in its scope by the highly sensitive nature of counterproliferation, and as additional sources become declassified, additional opportunities for research will open. The existing plans, tactics used, and material means often remain classified. Further study into this topic should focus on studying the relationships between the commanders

Task Force (JIATF) (Fort Leavenworth, KS: School of Advanced Military Studies Monograph, 2009), 8; Ian Hope, *Unity of Command In Afghanistan: A Forsaken Principle of War* (Carlisle, PA: Strategic Studies Institute, 2008), 1; Garrett P. Jensen, *DOD Disaster Response Unity of Effort Versus Unity of Command* (Carlisle, PA: US Army War College Program Research Project, 2006), 19. Howell similarly found the critiCAty of unity of command through studying the Civil Operations and Revolutionary Development Support program during the American intervention in Vietnam. Hope similarly finds that unity of command was conspicuously absent in operations in Afghanistan, with detrimental effects. Jensen, however, offers a counter to their arguments arguing that unity of effort remains sufficient, at least in disaster response within the United States.

<sup>&</sup>lt;sup>102</sup> Defense Threat Reduction Agency, US Strategic Command Center for Combating Weapons of Mass Destruction, Standing Joint Force Headquarters for Elimination, *Fact Sheet: DTRA, SCC-WMD, and SJFHQ-E* (Fort Belvoir, VA: Defense Threat Reduction Agency, 2014), accessed March 14, 2016, http://www.dtra.mil/Portals/61/Documents/dtra-fact-sheet---january-6-2014.pdf.

of the various combatant commands—most importantly US Strategic Command and US Special Operations Command. Additionally, research into the existing plans supporting Concept Plan 0400/8099 at the combatant command and sub-unified commands will provide more insight into the integration at the operational level of war. Finally, research into specific counterproliferation operations will provide valuable case studies. These areas of research, naturally, remain difficult to access and will for the foreseeable future. Nevertheless, the existing research yields lessons for today's military.

Today's military faces globalized economies and trans-regional threats. Drawing on the lessons of integrating and synchronizing counterproliferation efforts over the past twenty-five years suggests that the most important means to achieve synchronicity and unity of effort is to enforce unity of command. The rise of functional combatant commands as supported commanders, coupled with the transregional nature of threats may call into question the usefulness of regionally focused, geographic combatant commands. The increased use of standing joint task forces and standing joint force headquarters can focus directly on transregional threats, when the task forces and headquarters are empowered to receive support from the other combatant commands. Further, empowering an assistant secretary or creating a new position with the responsibility to oversee the challenges posed by a specific threat ensures appropriate oversight and provides an integrating capability. Finally, the creation of specific strategic guidance and orders or concept plans establishes command and support relationships ensures unity of effort and command. These orders can be similar to contingency plans like Concept Plan 0400/8099 or active orders like the Al Qaeda Network Execute Order. 103 Regardless, in addressing transregional threats, the department of defense and US military must seek to establish

<sup>&</sup>lt;sup>103</sup> Eric Schmitt and Mark Mazzetti, "Secret Order Lets U.S. Raid Al Qaeda," *The New York Times* (November 9, 2008), accessed March 14, 2016, http://www.nytimes.com/2008/11/10/washington/10military.html?\_r=0. The Al Qaeda Network Execute Order provides authorities to conduct transregional operations to pursue known Al Qaeda operatives and supporters, establishing necessary command and support relationships.

and enforce unity of command. The quicker it is able to achieve unity of command, the smoother the integration and synchronization of operations will be.

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